



# Australian Bureau of Statistics

## 6209.5 - Labour Mobility and Intentions, Western Australia, Oct 2008

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## Summary

### Main Features

#### NOTES

#### ABOUT THIS PUBLICATION

This publication contains results from the State Supplementary Survey conducted in Western Australia (WA) in October 2008. It presents information on WA. Topics covered include statistics on: employment and level of education, main field of study, whether working in field of qualification and future intentions in relation to study and job mobility.

Data items were collected from any responsible adult (ARA) on behalf of the household. A full data item list is available in the Appendix.

#### ABOUT THE SURVEY

The survey was conducted as a supplement to the ABS Monthly Population Survey. Please refer to the Explanatory Notes at the back of this publication for further details about this survey.

#### INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070.

## Summary of findings

### SUMMARY OF FINDINGS

#### LABOUR MOBILITY AND INTENTIONS

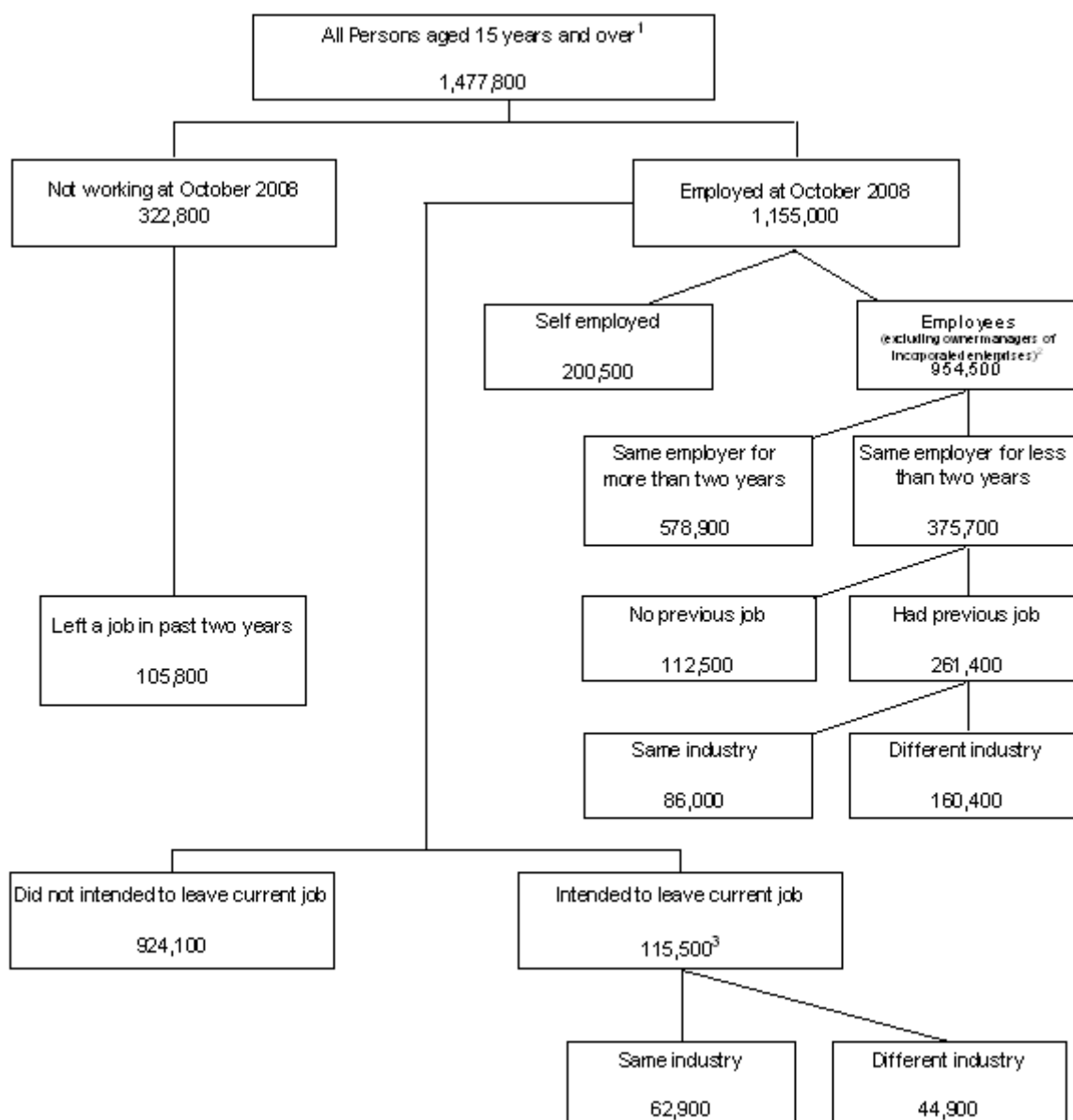
In the decade prior to 2008, the Western Australian economy experienced rapid growth fuelled by high commodities prices in the mining sector. It experienced sustained low levels

of unemployment and a shortage of skilled workers. With rising job opportunities, there was a noticeable increase in employment mobility. This publication presents findings from the 2008 Labour Mobility and Intentions Survey. It provides information about the levels of labour mobility that occurred over the two years prior to October 2008 as well as the education and work intentions of those currently in, or intending to return to, the labour force.

Since the survey was run, the global economic downturn has had a significant effect on the labour market. The findings of this survey will serve to provide a basis for comparison with labour mobility in WA following the downturn.

## **WORKING POPULATION OVERVIEW**

- In October 2008, there were an estimated 1,477,800 usual residents of private dwellings in Western Australia (WA) aged 15 years and over included in the scope for this survey. Excluded were people who were permanently unable to work and people aged 65 years and over permanently not intending to work. The survey population included people who were employed, unemployed or not in the labour force. Of these, 51% were males and 49% were females.
- An estimated 1,155,000 Western Australians were employed. Of these, 83% were working for an employer and 17% were in their own business. Of the 200,500 owner operators, 96% had fewer than 20 employees (Table 3).
- Three quarters (76%) of employed Western Australians were living in the Perth Metropolitan area.
- 34,000 employed Perth residents worked outside the Perth metropolitan area all or most of the time. Over half (54%) were employed in the mining industry.
- In the three years prior to the survey, 148,900 people moved to WA from overseas and interstate. Of these 46% moved to WA for work opportunities.
- 600,100 employed West Australians had a post school qualification and almost two thirds (65%) were working in the field of their highest qualification.
- In the two year period before the survey, 261,400 employees had changed jobs and 105,800 persons who were not currently working had ceased a job.
- The main reason for changing jobs was 'to obtain a better job or just wanted a change' (48%). For people who were not currently working, the main reason given for leaving their last job was family reasons (30%). This was more common among females (38%) than males (10%).
- At the time of the survey, one in ten (115,500) employed persons intended to leave their current job within 12 months.
- An estimated 276,800 Western Australians intended to undertake study for work related reasons.



## END NOTES

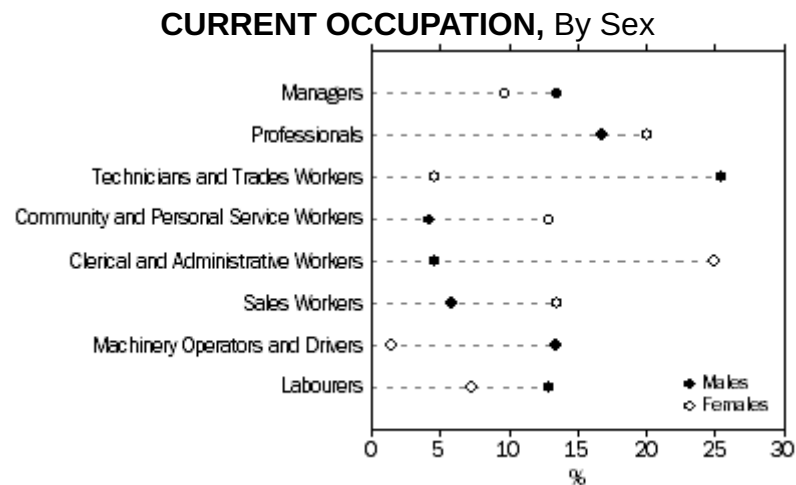
1. Excluding persons who are permanently unable to work and persons aged 65 years and over permanently not intending to work.
2. Refer to the Glossary under 'Employment type'.
3. Includes people intending to leave work permanently.

## CURRENT OCCUPATION

Information about current occupation and industry was obtained by merging data from August and November Labour Force data with the Labour Mobility and Intentions Survey. For further information see Explanatory Notes.

Of the 1,155,000 employed persons in WA almost one in five (18% or 209,500) employed persons were working as Professionals. The next most common groups were Technicians and trades workers (16%) and Clerical and administrative workers (14%). Managers and Labourers represented a further 12% and 10% respectively of employed persons (Table 3).

As shown in the figure below there were differences in occupation between the sexes. The most common occupations among males were Technicians and trades workers, Professionals, Managers and Machinery operators and drivers (25%, 17% 14% and 13% respectively) while for females they were Clerical and administrative workers (25%), Professionals (20%) , Sales workers (14%) and Community and personal service workers (13%).



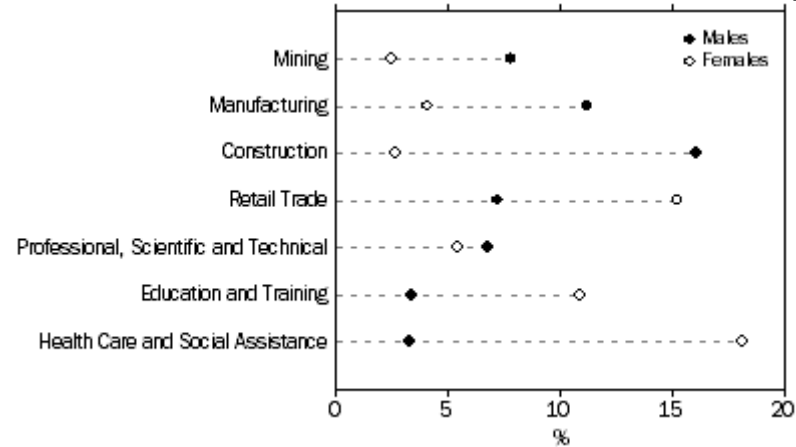
Differences in occupation were also found between people working for an employer and those in their own business. For example, the proportion identifying their occupation as Manager was higher among those operating their own business (23%) than those working for an employer (9%). Similarly, Technicians and trades workers represented 22% of self employed people and 15% of those working for an employer (Table 3).

**INDUSTRY OF CURRENT OCCUPATION**

The three most commonly reported industries of current occupation were Retail trade (11%), Construction (10%) and Health care and social assistance (10%) (Table 2).

Among males, the three most common industries were Construction (16%), Manufacturing (11%) and Mining (8%) while for females, they were Health care and social assistance (18%), Retail trade (15%) and Education and training (11%) (Table 3).

**SELECTED INDUSTRIES OF CURRENT OCCUPATION, By Sex**



Among people working for an employer, Retail trade and Health care and social assistance were the most commonly reported industries (12% and 11% respectively). Almost one quarter (23%) of people working in their own business were in the Construction industry (Table 3).

## **WORKING IN THE MINING INDUSTRY**

WA's economic boom was based on the success of the mining industry. This success was felt in other industries, where people provided support services, or were contracted to provide services. The survey also captured information on the extent of their association with the mining industry (See Explanatory Notes).

Of the 63,400 employed persons classified as working in the Mining industry, almost six in ten (59%) reported that they worked directly in a mining operation, 29% in a mining support activity and 6% were contracted to the mining industry (Table 7).

In addition, approximately one in five (19%) people in the Transport, postal and warehousing and the Professional, scientific and technical services industries and 13% of people in the Manufacturing industry reported that they were working in a mining support activity.

People contracted to the mining industry included 13% of those in Transport, postal and warehousing industry, 12% in Professional, scientific and technical services, 9% in Manufacturing and 8% of those working in the Construction industry (Table 7).

## **WORKING TIME SPENT AWAY FROM PERTH**

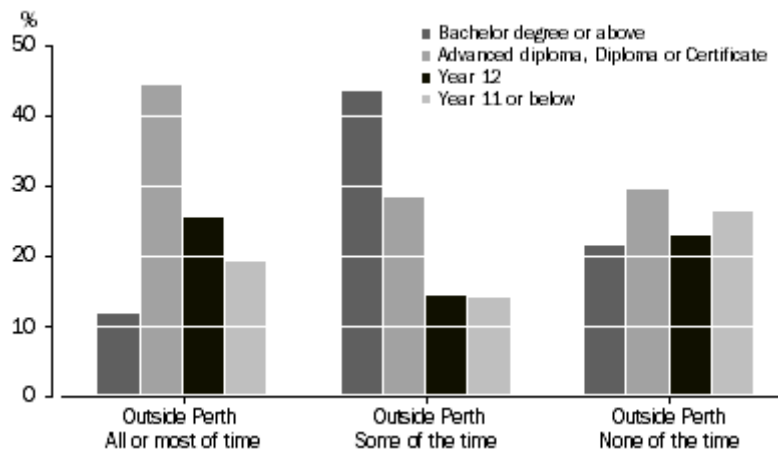
One aspect of the resources boom was that many people working in the mining industry and associated industries were working as fly-in fly-out workers. Furthermore, a number of other workers in other industries (e.g. Transport, postal and warehousing) also travelled outside the Perth metropolitan area for their work.

To establish the number of people affected by this working arrangement, respondents who were usual residents of Perth were asked whether they worked outside the metropolitan area for 'all or most of the time', 'some of the time' or whether they worked exclusively in the Perth metropolitan area (Table 8).

Of the estimated 876,000 employed persons in WA who were usual residents of Perth, 21% spent some time working outside the metropolitan area (4% outside Perth all or most of the time and 17% some of the time). There was some variation in this pattern according to the metropolitan statistical region in which people lived. The South East Metropolitan Statistical Region had the lowest proportion of residents spending at least some time working outside the Perth metropolitan area (17%) while the Central Metropolitan Statistical Region had the highest (27%) (Table 8).

Among Perth residents who worked outside the Perth metropolitan area all or most of the time, 44% (15,000) had an Advanced diploma, Diploma or Certificate as their highest level of education. A further 25% had Year 12 and 19% had Year 11 as their highest qualification. Only 12% had a bachelor degree or higher.

### **Working time spent away from Perth, By level of qualification**



People working outside Perth all or most of the time were concentrated in particular occupations including Machinery operators and drivers (37%), Technicians and trades workers (21%) and Professionals (16%).

Among people working outside Perth some of the time the most common occupations were Professionals (36%), Managers (25%) and Technicians and trades workers (13%).

Of the 876,000 employed persons usually resident in Perth, only 4% worked directly in the mining industry. However, of these people 72% worked outside Perth all or most of the time. By comparison, while people in the Transport, postal and warehousing industry accounted for a similar proportion (5%) of Perth's employed usual residents, only 24% spent any time working outside the Perth metropolitan area (Table 8).

## WORKING IN FIELD OF HIGHEST QUALIFICATION

Over half (52%) of WA's employed population had a non-school qualification. Of this group, two thirds (65%) were working in the field of their highest qualification. The proportions working in the field of their highest qualification were greater among those whose highest qualifications were in the fields of Education (76%), Health (72%) and Information Technology (71%) (Table 9).

Working in the field of highest qualification was most common in occupational categories that required specialised training such as Professionals and Technicians and trades workers. Over one third (35%) of males and 50% of females working in the field of highest qualification were employed as Professionals. Among males, a further 36% working in the field of highest qualification were Technicians and trades workers (Table 9).

## WORKING IN FIELD OF QUALIFICATION, Selected Occupations - by Sex



## REASON FOR NOT WORKING IN FIELD OF HIGHEST QUALIFICATION

The main reasons given by the 210,900 employed people who were not working in the field of their highest qualification were that they wanted a change (28%), they sought better pay (14%), family, personal or ill health (12%), no jobs in field (12%) and dissatisfaction with current job (12%) (Table 10).

Similar proportions of men (26%) and women (29%) wanted a change. However, a higher proportion of females cited family, personal or ill health (19%) compared with 6% of males as reasons for not working in the field of their qualification. One in five males (19%) cited better pay as the main reason.

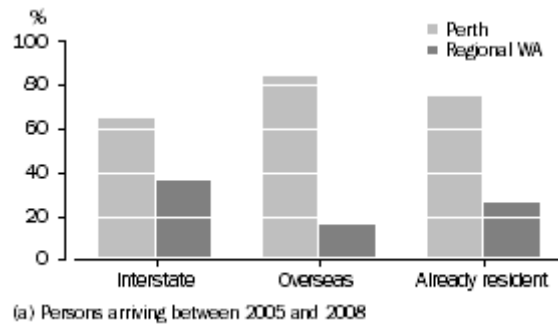
## MOVED TO WESTERN AUSTRALIA WITHIN LAST 3 YEARS

In the three years prior to the survey, an estimated 148,900 people aged 15 years and over moved to WA, with almost two thirds (63%) arriving from overseas and the remainder from interstate. Overall, almost half (46%) came to WA for work opportunities. However, the proportion was higher among interstate migrants (52%) than migrants from overseas (43%) (Table 11). This difference could be explained by overseas migrants having moved here for non-work related reasons such as family reunion, change of lifestyle or as refugees.

Over two thirds (69%) of these recent arrivals indicated an intention of remaining in WA for at least another three years. Another 14% indicated that they would leave WA within three years while 17% were undecided (Table 2).

Almost two thirds (64%) of the 55,700 people who had moved to WA from interstate were living in the Perth metropolitan area while the remainder were living in regional WA. The difference in settlement patterns was more marked among the 93,100 who migrated to WA from overseas, with 84% living in the Perth metropolitan area and 17% living in regional WA (Table 2). This may be explained by interstate migrants having moved here specifically to take up employment opportunities in the mining industry in areas outside Perth, whereas overseas migrants may be more concerned with getting established in a new country and accessing resources in the metropolitan area that enable re-settlement.

**Place of usual residence, By place of origin - Recent Migrants (a) and Residents**



Three quarters (77%) of the people who migrated to WA in the previous three years were employed in 2008. For people who migrated from interstate the proportion employed was 79%, compared with 76% of those from overseas (Table 11).

People who arrived from interstate tended to have higher education levels than overseas migrants. Among people from interstate, 43% had a highest education level of Advanced diploma, diploma or certificate, while among those from overseas, the corresponding proportion was 31%. Conversely, 15% of people from interstate had a highest education level of Year 12, compared with 25% of people from overseas.

At the upper and lower levels of education there was no significant difference between the two migrant groups. A bachelor degree or higher was held by 28% of interstate migrants and 27% of overseas migrants while 14% and 17% respectively had a highest education level of Year 11 or below.

A larger proportion of migrants from interstate (41%) were working in the field of their highest qualification. The comparable proportion for people who had moved to WA from overseas was 30% (Table 2). This difference could be due to a range of factors including difficulties entering the labour market because of language barriers, or overseas qualifications that were not recognized in WA.

## EMPLOYEES WHO CHANGED JOBS WITHIN LAST 2 YEARS

The focus in this section is job change among WA's 954,900 employees. Excluded are people in their own incorporated businesses who are normally classified as employees, and other owner managers.

At the time of the survey, 375,700 employees (39%) had been in their current job for less than two years. Of these, 74% of males and 65% of females had ceased a previous job within the past two years.

An estimated 19,200 (7%) employees had been self employed in their previous job while 92% had remained employees (Table 13).

The proportion of 15-24 year olds who had changed jobs (55%) was substantially lower than the proportion for older age groups (over 73%). One explanation is that the 15-24 year age group includes a higher proportion of people who are entering the work force for the first time. People in the 15-24 year age group represented over half (52%) of those who had not had a previous job.

Of the employees who had had a previous job in the two years prior to the survey, the largest group were Professionals (17%) followed by Technicians and trades workers and

Clerical and administrative workers (14% each) (Table 13).

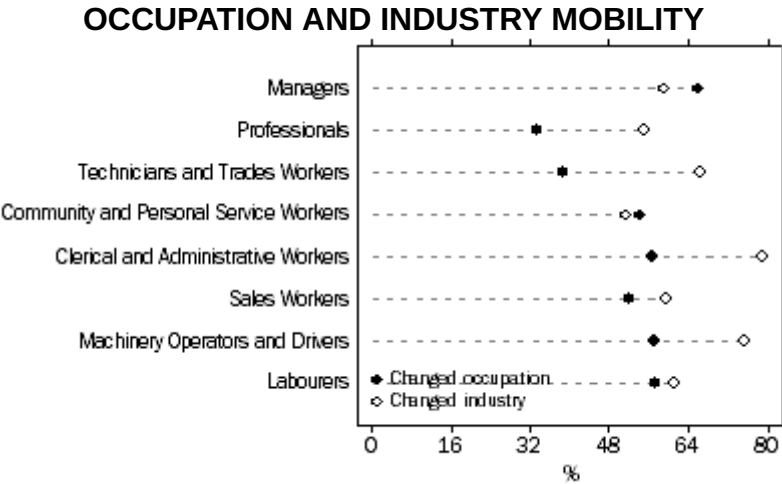
**OCCUPATION CHANGE**

Almost half (48%) of the 261,400 employees who had changed job had moved into a different occupation. The proportion changing occupation was highest among people who were currently Managers (66%) and lowest among people who were currently Professionals (33%) (Table 14).

**INDUSTRY CHANGE**

Approximately 61% (159,700) of employees who changed job in the two years prior to the survey had moved to a job in a different industry (Table 14).

As shown in the figure below, change of industry was highest among people who in their current job were employed as Clerical and administrative workers, Machinery operators and drivers and Technicians and trades workers (79%, 75% and 66% respectively).



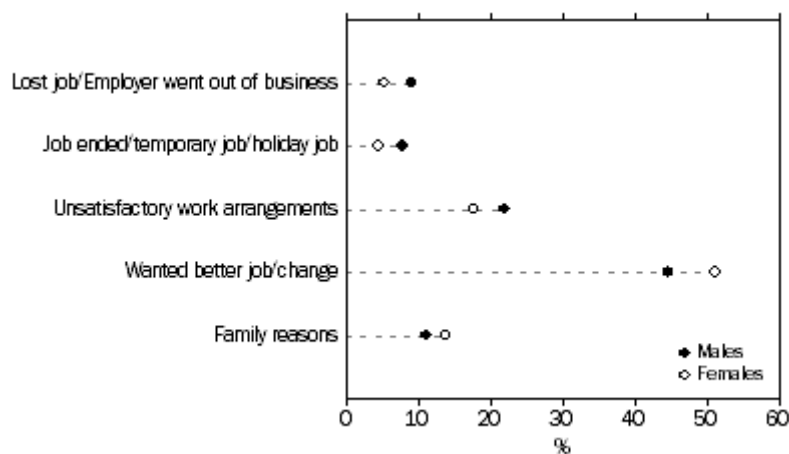
In the two years prior to October 2008, a large proportion of people in Construction (17%), Information media and communications (25%) and Administrative support industries (13%) had moved into the mining industry (data available on request).

**MAIN REASON FOR LEAVING PREVIOUS JOB**

The most common reasons given by employees for changing their job were to obtain a better job/just wanted a change (48%), unsatisfactory work arrangements (20%) and family reasons (12%). A further 7% changed jobs because they lost their job or their employer went out of business.

There were few differences between the sexes in motivations for leaving the previous job. However, more females left to obtain a better job or to have a change and for family reasons. More males left because of unsatisfactory work arrangements, loss of job, the employer going out of business or the job ended.

**Main reason for leaving previous job**



## INTENDING TO CHANGE FROM CURRENT JOB AND MAIN REASON FOR CHANGE

Respondents were asked about their future job intentions (see Explanatory Notes). Of the 1,155,000 people who were working at the time of the survey, one in ten indicated an intention to leave their current job within the next twelve months (Table 18).

While there was no difference in the overall proportion of males and females intending to leave their current job, there were some differences by age. Almost one in five (18%) 15-24 year olds and 14% of 25-34 year olds intended to change jobs. In the older age groups (35-44 years and 45 years and over) the proportions intending to change were 7% and 6% respectively.

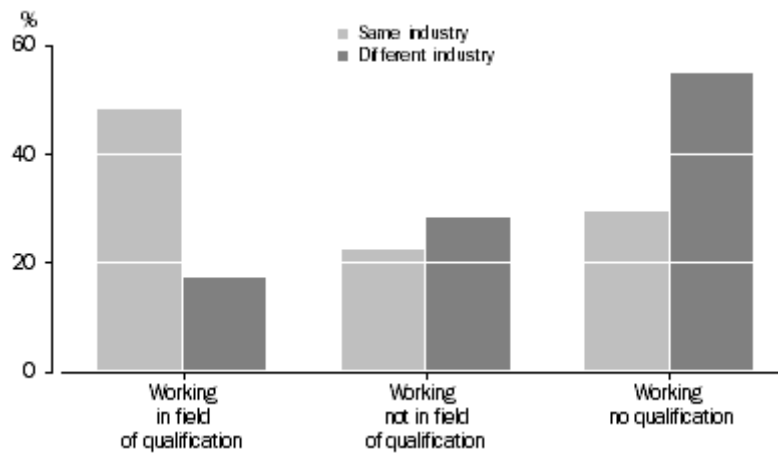
The proportion of people who intended to change their job was higher among people working for an employer (11%) than among those working in their own business (5%).

Over half (55%) of those intending to move were planning to move to a job within the same industry while a further 39% intended to move to a different industry. A planned change of industry was more common among younger job changers, with 58% of 15-24 year olds and 36% of 25-34 year olds intending to change industry. By contrast, 27% of 35-44 year olds and 22% of persons aged 45 years and over intended changing industry (Table 19).

The higher proportion of young people intending to change industry was probably due to more younger people being in casual employment, especially in retail. People working in the retail industry accounted for 22% of those who intended to change industry. As shown in Table 6, 15-24 year olds accounted for the same proportion (22%) of people employed in the retail industry.

People working in the field of their highest educational qualification represented almost half (48%) of those intending to move to a job in the same industry. In contrast, over half (55%) those working without a non-school qualification intended moving to a job in a different industry.

### Intention to change industry, Whether working in field of highest qualification



## REASON FOR INTENDING TO LEAVE CURRENT JOB

The main reason given for intending to leave a current job was to obtain a better job or simply a change (52%). This reason was reported more often by males (57%) than females (47%). A further 11% were leaving for family reasons and 10% were leaving because of unsatisfactory work arrangements, pay or hours. Leaving for family reasons was more common among females (18%) than males (6%) (Table 20).

## INTENTION TO STUDY WITHIN THE NEXT THREE YEARS

One consequence of the resources boom was a shortage of skilled labour. In response to this shortage and for the need for infrastructure planning, information was collected on study intentions.

An estimated 276,800 persons (49% males and 51% females) intended to study for a career or job related educational qualification within the next three years. Those intending to study included 23% of people who were not currently employed and 18% of people who were employed.

As shown in Table 21, age was a factor associated with study intentions. Over half (54% or 148,200) those intending to study were aged 15-24 years and of this group, 65% (96,900) were full time students.

One in five (20%) males who intended studying for work purposes were currently employed as Technicians and trades workers, 14% as Labourers and 12% as Professionals. Among females intending to study, 17% were currently employed as Sales workers, 14% as Professionals and 11% as Clerical and administrative workers.

Almost half (49%) of those intending to study indicated an intention to stay in their current job for the next twelve months while 14% said they would be leaving (Table 21).

## INTENDED LEVEL OF STUDY

Over one quarter (28%) of those intending to study intended to study for a Bachelor degree, 18% intended to study for a Certificate III/IV and 14% intended to study for a Postgraduate degree.

Full time students aged 15-24 years had a higher proportion who were intending to study for a Bachelor degree (42%) than the remainder of people intending to study (34%). Lower proportions of full time students intended to do a Postgraduate degree (6%), Advanced Diploma/Diploma (8%) and Certificate III/IV (8%). This compares with 34%, 26% and 43% respectively for those who were not full time students.

## INTENDED EDUCATIONAL INSTITUTION

Almost half (49%) of those intending to study for work related reasons intended to enrol at University or an other higher education institution, while 31% intended enrolling at TAFE or technical college (Table 23).

## About this Release

Findings from a one-off survey into labour mobility in Western Australia are presented in this publication. The survey covers topics on education, qualification attained, whether household members are still working in the area of qualification and the level of work travel required. The issue of trade qualifications, associated areas of employment and future work intentions are also examined.

# Explanatory Notes

## Explanatory Notes

### EXPLANATORY NOTES

#### INTRODUCTION

**1** This publication contains results from the **Western Australia (WA) Labour Mobility and Intentions Survey**, conducted throughout WA during the two weeks commencing Monday, 6 October 2008.

**2** The survey was conducted as a supplement to the ABS Monthly Population Survey (MPS). The MPS is based on a multi-stage area sample of private dwellings and a list sample of special dwellings (hotels, motels, hospitals, prisons, short-stay caravan parks, etc.). Persons living in special dwellings were excluded from the scope of this survey. Information is obtained from the occupants of the selected dwellings by specially trained interviewers. For details of the design, scope and coverage of the MPS, users should refer to any recent edition of the ABS publication, **Labour Force, Australia** (cat. no. 6202.0) or the November 2002 edition of **Information Paper: Labour Force Survey Sample Design** (cat. no. 6269.0).

#### SCOPE

**3** The **WA Labour Mobility and Intentions Survey** was conducted on a subset of the full sample of private and non-private dwellings in WA that were included in the MPS.

**4** The survey covered all persons who were usual residents of private dwellings and non-institutionalised dwellings (e.g. caravan parks, hostels etc) with the exception of:

- members of the Australian permanent defence forces
- certain diplomatic personnel of overseas governments, customarily excluded from censuses and surveys
- overseas residents in Australia
- members of non-Australian defence forces (and their dependents) stationed in Australia

**5** Excluded from the supplementary topic:

- households consisting entirely of visitors
- selections in the Indigenous Communities Frame
- respondents in Special Dwellings (e.g. prisons, hospitals and boarding schools)
- persons permanently unable to work
- persons aged 65 years and over permanently not intending to work

**6** Information was collected by either face to face or telephone interview from one responsible adult per household. This adult answered questions on behalf of all persons in the household aged 15 years and over. Information was sought from approximately 3,636 persons and data was obtained from approximately 95% or 3,458 of these people.

## **COVERAGE**

**7** Coverage rules were applied to ensure that each person was associated with only one dwelling and hence had only one chance of selection in the survey.

## **EFFECTS OF ROUNDING**

**8** Estimates in this publication have been rounded and discrepancies may occur between sums of the component items and totals.

## **OCCUPATION AND INDUSTRY DATA**

**9** Information about the industry of a person's current occupation was obtained by merging data from August and November Labour Force data with the Labour Mobility and Intentions Survey. Where records could not be successfully matched with the Labour Force data a value was imputed.

## **RELATIONSHIP WITH MINING INDUSTRY**

**10** To measure the extent of the influence of the mining industry in the Labour Force people working for an employer were asked whether they worked in a mining operation or mining support activity (see Glossary). Owner managers were asked whether their business was a mining operation or support activity or whether it provided a service to the mining industry.

Their responses were then cross classified with industry of current occupation.

## **INTENTION TO LEAVE CURRENT JOB**

**11** People who were working were asked whether they intended to leave or change their current job within the next 12 months, whether they intended to leave the work force permanently and whether they intended to move to a job in a different industry.

## **INTENDED EDUCATION**

**12** Respondents were asked whether they intended to study for another educational qualification within the next three years and if so whether it was for career or job related reasons. They were asked about the type of educational institution or organisation at which they intended to enrol, and the level of qualification intended to study.

## **WORKING OUTSIDE PERTH**

**13** To establish the number of people affected by the fly-in fly-out working arrangements, people who were usual residents of Perth were asked whether they worked outside the metropolitan area for 'all or most of the time' , 'some of the time' or whether they worked 'all of the time in the Perth metropolitan area'.

## **ACKNOWLEDGEMENT**

**14** ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated. Without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the **Census and Statistics Act, 1905**.

## **RELATED PUBLICATIONS**

**15** The ABS produces a wide range of publications concerning social, housing and demographic statistics. Users may wish to refer to the following ABS publications which relate to the survey topic:

- **Labour Force, Australia, April 2009**, cat. no. 6202.0
- **Locations of Work, Nov 2008**, cat. no. 6275.0
- **Labour Mobility, Australia, Feb 2008**, cat. no. 6209.0
- **Labour Force Survey and Labour Mobility, Australia: Basic and Expanded Confidentialised Unit Record Files, Technical Manual, Feb 2008**, cat. no. 6202.0.30.005
- **Microdata: Labour Force Survey and Labour Mobility, Basic and Expanded CURF, Australia, Feb 2008**, cat. no. 6202.0.30.004
- **Information Paper: Population Concepts, Australia 2008**, cat. no. 3107.0.55.006
- **Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006**, cat. no.1292.0

**16** Current publications and other products released by the ABS are listed in the **Catalogue**

**of Publications and Products** (cat. no. 1101.0). The Catalogue is available from any ABS office or the ABS web site <<https://www.abs.gov.au>>. The ABS also issues a daily **Release Advice** on the web site which details products to be released in the week ahead.

## Glossary

### GLOSSARY

#### **Advanced Diploma or below**

For this publication this includes Advanced Diploma, Diploma, Certificate III/IV, Certificate I/II, Certificate not further defined, Other education and Level not determined.

#### **All other households**

This may include family of related individuals residing in the same household. These individuals do not form a couple or parent-child relationship with any other person in the household and are not related to a couple or one parent family in the household.

#### **Ceased a job**

Left a job voluntarily or involuntarily. Leaving a job voluntarily includes leaving a job because:

- of unsatisfactory work arrangements/pay/hours
- the job was seasonal, temporary or a holiday job and they left that job to return to studies
- they retired, started a new business, got a better job, or left for family or other reasons.

Losing a job involuntarily includes leaving a job because:

- they were retrenched or their business closed down because of financial difficulties
- the job was seasonal, temporary or a holiday job and they did not leave that job to return to studies
- they left their job because of their own ill health or injury.

#### **Change in employer/business**

People who were employed at October 2008 and, within the 2 years to October 2008, ceased working with one employer/business and started working with another employer/business in relation to their main job.

#### **Change in employment type**

Any change in employment type in relation to main job.

#### **Change in industry Division**

Any change between industry Divisions as classified by the Australian and New Zealand

Standard Industrial Classification (ANZSIC), Second Edition, 2006 (cat. no. 1292.0).

### **Change in Major occupation group**

Any change between Major occupation groups as classified by the Australian and New Zealand Standard Classification of Occupations, (ANZSCO), First Edition, 2006 (cat. no. 1220.0).

### **Contributing family workers**

People who work without pay, in an economic enterprise operated by a relative.

### **Couple only household**

A couple relationship is defined as two people usually residing in the same household who share a social, economic and emotional bond usually associated with marriage and who consider their relationship to be a marriage or marriage-like union. This relationship is identified by the presence of a registered marriage or de facto marriage.

### **Couple with children**

This is a couple family with children present. It can be expanded to elaborate on the characteristics of those children, such as their number, age and dependency status. This family may or may not include other related individuals.

### **Current employer/business**

Refers to the employer/business which the person had in the week before the interview. Where the person had more than one employer/business, the employer/business for which most hours were usually worked, was regarded as the current employer/business.

### **Did not change employer/business in two years to October 2008**

Refers to people who were employed at October 2008 in the same job for 2 years or more and people who had been in their current job for less than two years but had not had any other job in the 2 year period.

### **Different employment type**

See 'Change in employment type'.

### **Different industry**

See 'Change in industry Division'.

### **Different occupation**

See 'Change in Major occupation group'.

### **Duration of last job**

The period from the commencement of the last job up to the time the person ceased working in that job.

### **Duration with employer/business at October 2008**

A period of either less than or more than 2 years from when current employment commenced to October 2008.

## **Employed**

People aged 15 years and over who, during the reference week:

- worked for one hour or more for pay, profit, commission or payment in kind, in a job or business or on a farm (comprising employees, employers and own account workers); or
- worked for one hour or more without pay in a family business or on a farm (i.e. contributing family workers); or
- were employees who had a job but were not at work and were away from work for less than four weeks up to the end of the reference week; or
- away from work for more than four weeks up to the end of the reference week and received pay for some or all of the four week period to the end of the reference week; or
- away from work as a standard work or shift arrangement; or
- on strike or locked out; or
- on workers' compensation and expected to return to their job; or were employers or own account workers who had a job, business or farm, but were not at work.

## **Employees**

People who work for a public or private employer and receive remuneration in wages, salary, a retainer fee from their employer while working on a commission basis, tips, piece rates, or payment in kind, or people who operate their own incorporated enterprise with or without hiring employees.

## **Employer/business at October 2008**

See 'Current employer/business'.

## **Employers**

People who operate their own unincorporated economic enterprise or engage independently in a profession or trade, and hire one or more employees.

## **Employment type**

Classifies employed people according to the following categories on the basis of their main job (that is, the job in which they usually worked the most hours):

- Employees (excluding owner managers of incorporated enterprises)
  - with paid leave entitlements
  - without paid leave entitlements
- Owner managers of incorporated enterprises
- Owner managers of unincorporated enterprises
- Contributing family workers.

## **Fly-in Fly-out workers**

Fly-in Fly-out (FIFO) mining operations are those where workers commute to the workplace and are provided with food and accommodation during their stay at the work-site. Workers travel from their usual place of residence and remain there for a period of time and return home between rosters. Also referred to as long distance commuting including Ship-in Ship-out, Drive-in Drive-out, or other transport combinations.

## **Household**

A group of residents of a dwelling who share common facilities and meals or who consider themselves to be a household. It is possible for a dwelling to contain more than one household, for example, where regular provision is made for groups to take meals separately and where persons consider their household to be separate.

## **Industry**

All occurrences of industry in this publication refer to Division, as classified by the Australian and New Zealand Standard Industrial Classification (ANZSIC), Second Edition, 2006 (cat. no. 1292.0).

For this Supplementary Survey, Industry classifications for a person's current job were derived from August 2008 and November 2008 Labour Force Surveys (see Explanatory Notes) while for previous and intended industry the question was asked directly.

## **Job leavers**

People who ceased a job voluntarily, because:

- of unsatisfactory work arrangements/pay/hours; or
- the job was seasonal, temporary or a holiday job and they left that job to return to studies; or
- they retired, started a new business, got a better job, left for family reasons.

## **Job losers**

People who ceased a job involuntarily, because:

- they were retrenched or their business closed down because of financial difficulties; or
- the job was seasonal, temporary or a holiday job and they did not leave that job to return to studies; or
- they left their job because of their own ill health or injury.

## **Last job**

The last job in which employment ceased during the reference period.

## **Level of highest educational attainment**

Level of highest educational attainment identifies the highest achievement a person has attained in any area of study. It is not a measurement of the relative importance of different fields of study but a ranking of qualifications and other educational attainments regardless of the particular area of study or the type of institution in which the study was undertaken. See Appendix for an explanation of how highest level is derived.

## **Level of highest non-school qualification**

Non-school qualifications are awarded for educational attainments other than those of pre-primary, primary or secondary education. They include qualifications at the Post Graduate Degree level, Master Degree level, Graduate Diploma and Graduate Certificate level, Bachelor Degree level, Advanced Diploma and Diploma level, and Certificates I, II, III and IV levels. Non-school qualifications may be attained concurrently with school qualifications.

## **Lone parent with children**

A family consisting of a lone parent with at least one dependent or non-dependent child (regardless of age) who is also usually resident in the family. This family type may or may not include other related individuals.

The one parent family concept can be expanded to elaborate on the characteristics of the children, such as whether they are dependent children or not and for dependent children whether they are aged under 15 or are dependent students. Examples of one parent families include: a 25-year-old parent with dependent children; and an 80-year-old parent living with a 50-year-old child.

## **Main job**

The job in which the most hours were usually worked.

## **Mining industry**

Mining is used in the broad sense to include underground or open cut mining, dredging, quarrying, well operations or evaporation pans, recovery from ore dumps or tailings as well as beneficiation activities and other preparation work. Two basic activities are involved, Mine operation and Mining support activities.

## **Mine operation**

Mine operation includes units operating mines, quarries, or oil and gas wells on their own account or for others on a contract or fee basis, as well as mining sites under development.

## **Mining support activities**

Mining support activities include units that perform mining services on a contract or fee basis, and exploration (except geophysical surveying).

## **Non-metropolitan region**

The **Australian Standard Geographical Classification** (ASGC) divides Western Australia into two Major Statistical Regions, namely Perth Major Statistical Region and the Balance of Western Australia. Non-metropolitan region is represented by the Balance of Western Australia Major Statistical Region, and can be further subdivided into two Statistical Regions, namely: Lower Western Australia Statistical Region; and Remainder - Balance Western Australia Statistical Region. For further information refer to **Australian Standard Geographical Classification** (cat. no. 1216.0).

The non-metropolitan region refers to all regions of Western Australia outside the Perth metropolitan area.

## **Not employed**

People who were either 'unemployed and looking for work' or 'not in the labour force' as defined.

### **Not in the labour force**

People who were not in the categories 'employed' or 'unemployed' as defined.

### **Not working at October 2008**

See 'Not employed'.

### **Occupation**

All occurrences of occupation in this publication relate to Major Group as defined by - Australian and New Zealand Standard Classification of Occupations (ANZSCO), First Edition, 2006 (cat.no.1220.0).

For this Survey, occupation classifications for a person's current job were derived from the August 2008 and November 2008 Labour Force Surveys (see Explanatory Notes). For previous jobs, occupation was asked directly.

### **Own account workers**

People who operated their own unincorporated economic enterprise or engaged independently in a profession or trade, and hired no employees.

### **Owner managers**

People who work in their own business, with or without employees, whether or not the business is an incorporated enterprise. Comprises owner managers of incorporated enterprises and owner managers of unincorporated enterprises.

### **Owner managers of incorporated enterprises (OMIE)**

People who worked in their own incorporated enterprise, that is, a business entity which is registered as a separate legal entity to its members or owners (also known as a limited liability company). These people are usually classified as employees under 'status in employment'.

For the purposes of this publication these OMIEs are classified as self employees.

### **Owner managers of unincorporated enterprises**

People who operated their own unincorporated enterprise, that is, a business entity in which the owner and the business are legally inseparable, so that the owner is liable for any business debts that are incurred. Includes those engaged independently in a trade or profession. These people are classified as employers under 'status in employment' if their business has employees, or own account workers if it does not.

### **Previous job**

See 'Last job'.

### **Reference period**

The week up to the end of the week prior to interview.

### **Reference week**

The week preceding the week in which the interview was conducted.

### **Region of usual residence**

A person's area of usual residence as classified by the Statistical Region structure in the Australian Standard Geographical Classification (ASGC). The classification divides Western Australia into two Major Statistical Regions - the Perth Major Statistical Region and the Balance of WA (otherwise known as the non-metropolitan region.) Perth Major Statistical Region is further divided into Statistical Regions of - Central Metropolitan, East Metropolitan, North Metropolitan, South West Metropolitan and South East Metropolitan. For further information refer to Australian Standard Geographical Classification, cat. no. 1216.0 and Information Paper: Regional Labour Force Statistics, September 1997, cat. no. 6262.0.

### **Self employed**

See "Owner managers". For the purposes of this publication all owner managers (of both incorporated or unincorporated enterprises) are categorised as self employed.

### **Small business**

Any business with fewer than 20 employees.

### **Status in employment**

Employed people classified by whether they were employees, employers, own account workers, or contributing family workers.

### **TAFE**

Technical and Further Education colleges are non-university government funded tertiary institutions that provide vocational training courses in higher education and issue higher education awards such as: certificates and diplomas.

### **Unemployed**

People aged 15 years and over who were not employed during the reference week, and:

- had actively looked for full-time or part-time work at any time in the four weeks up to the end of the reference week and were available for work in the reference week, or
- were waiting to start a new job within four weeks from the end of the reference week, and could have started in the reference week if the job had been available then.

### **Worked at some time during the year ending October 2008**

For practical reasons it was not possible to include all of the questions from the Labour Force Survey for previous periods. People who were either currently employed, or reported having worked for an employer or in their own business at some time in the previous year, were defined as having worked at some time during the year ending October 2008.

See 'Employed'.

## **Abbreviations**

### **ABBREVIATIONS**

The following symbols and abbreviations are used in this publication:

ABS	Australian Bureau of Statistics
ARA	any responsible adult
ASGC	Australian Standard Geographical Classification
MPS	Monthly Population Survey
RSE	relative standard error
SE	standard error
SR	statistical region
WA	Western Australia

## **Appendix**

### **APPENDIX**

#### **POPULATIONS AND DATA ITEMS**

Scoping of the population selected for the survey.

#### **Populations**

All persons aged 15 years and over as at October 2008, excluding persons permanently unable to work or persons aged 65 years and over and permanently not intending to work.

All persons aged 15 years and over who moved to Western Australia for work purposes within the three years ending October 2008.

All persons aged 15 years and over who were working, either for an employer or in their own business in October 2008.

All persons aged 15 years and over who were working, either for an employer or in their own business in October 2008, who had a post school educational qualification.

All employed persons aged 15 years and over who in October 2008 were usual residents of the Perth metropolitan area.

All persons aged 15 years and over who were working for an employer in October 2008.

All persons aged 15 years and over who were working for an employer and who had been in their current job for less than two years in October 2008.

All persons aged 15 years and over who were currently not working, either unemployed and looking for work or not in the labour force in October 2008.

All persons aged 15 years and over who were currently not working and who had ceased a job in the two years ending October 2008.

Persons who intend to leave their current job.

Persons who intend to study for work related reasons.

## **ADDITIONAL DATA AVAILABLE**

In addition to the statistics provided in this publication, the ABS can produce customised tabulations on request. Subject to confidentiality and sampling variability constraints, tabulations can be produced from the survey by cross-classifying any of the following data items for the relevant survey populations.

## **DATA ITEMS**

Data variables used in the survey.

### **Household statistical area**

Place of usual residence

Perth metropolitan area  
Remainder WA

### **Sex**

Males

Females

### **Age**

Age categories

15-19  
20-24 25-29  
30-34 35-39  
40-44 45-49  
50-54 55+

## **Household characteristics**

### ***Marital status***

Married (including defacto/partner)

Not married

### ***Relationship in household***

Family member

Husband, wife or partner

With dependents

Without dependents

Lone parent

With dependents

Without dependents

Dependent student

Non-dependent child

Other related individual

Non-family member

Lone person

Not living alone

Relationship not determined

### ***Household type***

Person living alone

Couple only

Couple with children

Couple with children aged 0-14

Couple with children aged 0-14, and 15 and over

Couple with children aged 15 and over

Lone parent with children

Lone parent with children aged 0-14

Lone parent with children aged 0-14, and 15 and over

Lone parent with children aged 15 and over

All other households

**Household size**

Lone person

Two person

Three person

Four or more persons

**Migration to WA**

Migration from

Interstate

Overseas

Whether person came to Western Australia for job opportunities

Intention to remain in Western Australia

Less than three years

Three or more years

**Educational Qualifications**

Highest year of primary or secondary schooling completed

Year 12 or equivalent

Year 11 or equivalent

Year 10 or equivalent

Year 9 or equivalent

Year 8 or equivalent

Never attended school

Level of highest educational attainment

Higher degree

Postgraduate diploma

Bachelor degree

Advanced Diploma/Diploma

Certificate III/IV

Certificate I/II

Certificate - level not determined

Year 12

Year 11  
Year 10 or below

Main field of study for the qualification

Natural and Physical Sciences  
Information Technology  
Engineering and Related Technologies  
Architecture and Building  
Agriculture Environmental and Related Studies  
Health  
Education  
Management and Commerce  
Society and Culture  
Creative Arts  
Food Hospitality and Personal Services

Highest qualification completion date

Before 1998  
1998 or later date

### **Labour Force status**

Labour Force status at October 2008

Employed  
Unemployed  
Not in labour force

### **Current job characteristics**

Employment type at October 2008

Employees (excluding owner managers of incorporated enterprises)  
Employers  
    Owner managers of incorporated enterprises  
    Owner managers of unincorporated enterprises  
Own account workers  
Contributing family workers

Number of employees of the business

None  
Less than 20  
20 or more  
Don't know

Whether person is currently working in field of highest qualification

Main reason for not working in field of qualification

- No jobs available in field
- Laid off
- Sought better pay
- Lack of career prospects
- Dissatisfied with job
- Wanted a change
- Family, personal or ill health
- Other

How long worked in current job (for an employer)

- Two years or more
- Less than two years

How long worked in current job (own business)

- Two years or more
- Less than two years

Work location - Time Perth residents spent working outside metropolitan area

- All the time
- Most of the time
- Some of the time
- None of the time

Occupation at October 2008

- Managers
- Professionals
- Technicians and Trades workers
- Community and Personal Service workers
- Clerical and Administrative workers
- Sales workers
- Machinery Operators and Drivers
- Labourers
- Not known

Industry at October 2008

- Agriculture, forestry and fishing
- Mining
- Manufacturing
- Electricity, gas, water and waste services
- Construction
- Wholesale trade
- Retail trade

Accommodation and Food services  
Transport, Postal and Warehousing  
Information Media and Telecommunications  
Financial and insurance Services  
Rental, Hiring and Real Estate services  
Professional, Scientific and Technical services  
Public Administration and Safety  
Education and Training  
Health Care and Social Assistance  
Arts and recreation services  
Other services  
Not known

Whether the employer/own business provides a service in

Mining operation  
Mining support activity  
Neither  
Don't know

### **Previous job characteristics**

Employment status

Employees who changed jobs within the past two years  
Not working (Unemployed or NILF persons) had left a job, business or farm in the past two years

Previous employment type

Employee  
Self employed  
Not known

Occupation of previous job

Managers  
Professionals  
Technicians and Trades workers  
Community and Personal Service workers  
Clerical and Administrative workers  
Sales workers  
Machinery Operators and Drivers  
Labourers  
Not known

Industry of previous job

Agriculture, forestry and fishing  
Mining  
Manufacturing

Electricity, gas, water and waste services  
Construction  
Wholesale trade  
Retail trade  
Accommodation and Food services  
Transport, Postal and Warehousing  
Information Media and Telecommunications  
Financial and insurance Services  
Rental, Hiring and Real Estate services  
Professional, Scientific and Technical services  
Public Administration and Safety  
Education and Training  
Health Care and Social Assistance  
Arts and recreation services  
Other services  
Not known

Duration of previous employment

Less than 5 years  
5 and under 10 years  
10 and under 20 years  
20 years and more

Main reason for leaving previous employment

Lost job/Employer went out of business  
Job ended/Temporary or seasonal job  
Unsatisfactory work arrangements/pay/hours  
Own ill health, stress or injury  
Holiday job/Returned to studies  
Self employed and own business closed  
To obtain better job/Just wanted a change  
Retired  
Family reasons  
Other

**Intention to leave current job within the next 12 months**

Whether employed persons intend leave current job/business

Intended change

Leave work force permanently  
Work in a different job for the same employer  
Continue the same type of job but for a different employer  
Change jobs to a different industry

Main reason of intention to change job

Losing job/Employer going out of business

Job ending/temporary or seasonal work  
Unsatisfactory work arrangements/pay/hours  
Own ill health, stress or injury  
Holiday job/returning to studies  
Self employed and business closing down  
To obtain better job/Just want a change  
To start own business/new business  
Retiring  
Family reasons  
Other

#### Intended industry

Agriculture, forestry and fishing  
Mining  
Manufacturing  
Electricity, gas, water and waste services  
Construction  
Wholesale trade  
Retail trade  
Accommodation and Food services  
Transport, Postal and Warehousing  
Information Media and Telecommunications  
Financial and insurance Services  
Rental, Hiring and Real Estate services  
Professional, Scientific and Technical services  
Public Administration and Safety  
Education and Training  
Health Care and Social Assistance  
Arts and recreation services  
Other services  
Not known

#### **Education and training intentions within the next three years**

Whether person has intention to study for an educational qualification within the next three years

Whether intended study for career or work related reasons

Education institution enrolment intention

Technical and Further Education (TAFE)  
University / Other higher education  
Secondary school  
Professional or industry association  
Equipment/product manufacturer or supplier  
Skillshare centre or other government training centre  
Business college  
Adult or community education centre  
Industry skills centre  
Other private training organisation

Other (please specify)

## FURTHER INFORMATION

For further information about additional data available on request, please contact Judy Griffin on Perth (08) 9360 5935.

# Data Quality (Technical Note)

## TECHNICAL NOTE DATA QUALITY

### RELIABILITY OF THE ESTIMATES

**1** Since the estimates in this publication are based on information obtained from occupants of a sample of dwellings, they are subject to sampling variability. That is, they may differ from those estimates that would have been produced if all occupants of all dwellings had been included in the survey. One measure of the likely difference is given by the standard error (SE), which indicates the extent to which an estimate might have varied by chance because only a sample of dwellings (or occupants) was included. There are about two chances in three (67%) that a sample estimate will differ by less than one SE from the number that would have been obtained if all dwellings had been included, and about 19 chances in 20 (95%) that the difference will be less than two SEs.

**2** Another measure of the likely difference is the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the estimate:

$$RSE\% = \frac{SE}{estimate} \times 100$$

**3** RSEs for estimates from the 2008 Labour Mobility and Intentions survey are published for each individual data cell. The Jackknife method of variance estimation is used for this process, which involves the calculation of 30 'replicate' estimates based on 30 different subsamples of the original sample. The variability of estimates obtained from these subsamples is used to estimate the sample variability surrounding the main estimate.

**4** Limited publication space does not allow for the separate indication of the SEs and/or RSEs of all the estimates in this publication. However, RSEs for all these estimates will be available free-of-charge on the ABS web site <[www.abs.gov.au](http://www.abs.gov.au)>.

**5** In the tables in this publication, only estimates (numbers and proportions) with RSEs less than 25% are considered sufficiently reliable for most purposes. However, estimates with larger RSEs have been included and are preceded by an asterisk (e.g. \*3.4) to indicate they are subject to high SEs and should be used with caution. Estimates with RSEs greater than 50% are preceded by a double asterisk (e.g. \*\*2.1) to indicate that they are considered too unreliable for general use.

**6** The estimates in this publication were obtained using a post-stratification procedure. This procedure ensured that the survey estimates conformed to an independently estimated

distribution of the population, by state, part of state, age, sex and labour force status, rather than the distribution among respondents.

## PROPORTIONS AND PERCENTAGES

**7** Proportions formed from the ratio of two estimates are also subject to sampling errors. The size of the error depends on the accuracy of both the numerator and the denominator. A formula to approximate the RSE of a proportion is given below. This formula is only valid when x is a subset of y.

$$RSE\left(\frac{x}{y}\right) = \sqrt{[RSE(x)]^2 - [RSE(y)]^2}$$

## DIFFERENCES

**8** Published estimates may also be used to calculate the difference between two survey estimates (of numbers or percentages). Such an estimate is subject to sampling error. The sampling error of the difference between two estimates depends on their SEs and the relationship (correlation) between them. An approximate SE of the difference between two estimates (x-y) may be calculated by the following formula:

$$SE(x - y) = \sqrt{[SE(x)]^2 + [SE(y)]^2}$$

**9** While this formula will only be exact for differences between separate and uncorrelated characteristics or subpopulations, it is expected to provide a good approximation for all differences likely to be of interest in this publication.

## SIGNIFICANCE TESTING

**10** The statistical significance test for any of the comparisons between estimates can be performed to determine whether it is likely that there is a difference between the corresponding population characteristics. The standard error of the difference between two corresponding estimates (x and y) can be calculated using the formula in paragraph 8. This standard error is then used to calculate the following test statistics:

$$\frac{(x - y)}{SE(x - y)}$$

**11** If the value of this test statistic is greater than 1.96 then we may say there is good evidence of a real difference (at the 95% confidence interval level) in the two populations with respect to that characteristic. Otherwise, it cannot be stated with confidence that there is a real difference between the populations.

**12** The imprecision due to sampling variability, which is measured by the SE, should not be confused with inaccuracies that may occur because of imperfections in reporting by respondents and recording by interviewers, and errors made in coding and processing data. Inaccuracies of this kind are referred to as non-sampling error, and they occur in any enumeration, whether it be a full count or sample. Every effort is made to reduce non-sampling error to a minimum by careful design of questionnaires, intensive training and supervision of interviewers, and efficient operating procedures.

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